

SUMMARY OF REGULATIONS FOR CONCENTRATED ANIMAL FEEDING OPERATIONS

Introduction

Wastes from confined livestock can be a source of pollutants when they are discharged to state waters. Pollutants most often reach state water as a result of precipitation (rainfall or snow melt). Pollution of surface and ground water is prohibited, and permits are required for discharges containing pollutants. This chapter describes the permitting requirements that apply to livestock production facilities and outlines the process for determining which operations require permits.

The Montana Water Quality Act

Discharges of wastes, including animal wastes to state waters are governed by The Montana Water Quality Act (75-5-101 et seq. MCA). Section 605 of the Act states that it is unlawful to cause pollution of any state waters or to place wastes in a location where they will cause pollution (75-5-605 (1)(a) MCA). It is also unlawful to discharge sewage, industrial waste, or other wastes into any state waters without a current permit from the Department of Environmental Quality (DEQ) (75-5-605 (2)(c) MCA).

“State waters” means a body of water, irrigation system, or drainage system, either surface or underground. The term does not apply to a) ponds or lagoons used solely for treating, transporting, or impounding pollutants; or b) irrigation waters or land application disposal waters when the waters are used up within the irrigation or land application disposal system and the waters are not returned to state waters. (See 75-5-103(29), MCA.)

Livestock owners can assess their operations by asking, **"Do waterborne wastes discharge, or have the potential to discharge, from my livestock production area or land application area into any state waters?"** If the answer is "no," a permit is not required. If the answer is "yes", the owner needs to obtain coverage under a Montana Pollutant Discharge Elimination System (MPDES) permit. Achieving compliance may only require minor changes to completely isolate wastes from state waters. Permits are only required for animal feeding operations (AFOs) that actually discharge, and for operations that are either defined or designated as Concentrated Animal Feeding Operations (CAFOs).

The Permit Program

The DEQ Water Protection Bureau administers the MPDES permit program. The MPDES program includes a discharge permit for AFOs. An AFO has **both** of the following conditions:

1. Animals are stabled, confined, and fed or maintained for a total of **45 days or more** in any 12-month period; and,
2. Crops, vegetation forage growth, or post-harvest residues are **not sustained** in the normal growing season over any portion of the facility.

An AFO is a CAFO if it meets the definition of either a large or medium CAFO.

A large CAFO is an AFO that stables or confines at a minimum:

- (a) 700 mature dairy cows, whether milked or dry;
- (b) 1,000 veal calves;
- (c) 1,000 cattle other than mature dairy cows or veal calves;
- (d) 2,500 swine each weighing 55 pounds or more;
- (e) 10,000 swine each weighing less than 55 pounds;
- (f) 500 horses;
- (g) 10,000 sheep or lambs;
- (h) 55,000 turkeys;
- (i) 30,000 laying hens or broilers if the AFO uses a liquid manure-handling system;
- (j) 125,000 chickens, other than laying hens, if the AFO uses other than a liquid manure handling system;
- (k) 82,000 laying hens if the AFO uses other than a liquid manure-handling system;
- (l) 30,000 ducks if the AFO uses other than a liquid manure-handling system; or
- (m) 5,000 ducks if the AFO uses a liquid manure-handling system.

A medium CAFO is an AFO with the type and number of animals that fall within any of the ranges listed in subsection (a) below and that has been defined or designated as a CAFO. An AFO is defined as a medium CAFO if:

- (a) the type and number of animals that it stables or confines falls within any of the following ranges:
 - (i) 200-699 mature dairy cows, whether milked or dry;
 - (ii) 300-999 veal calves;
 - (iii) 300-999 cattle other than mature dairy cows or veal calves;
 - (iv) 750-2,499 swine each weighing 55 pounds or more;
 - (v) 3,000-9,999 swine each weighing less than 55 pounds;
 - (vi) 150-499 horses;
 - (vii) 3,000-9,999 sheep or lambs;
 - (viii) 16,500-54,999 turkeys;
 - (ix) 9,000-29,999 laying hens or broilers if the AFO uses a liquid manure-handling system;
 - (x) 37,500-124,999 chickens, other than laying hens, if the AFO uses other than a liquid manure-handling system;
 - (xi) 25,000-81,999 laying hens if the AFO uses other than a liquid manure-handling system;
 - (xii) 10,000-29,999 ducks if the AFO uses other than a liquid manure-handling system; or
 - (xiii) 1,500-4,999 ducks if the AFO uses a liquid manure-handling system; and
- (b) either of the following conditions is met:
 - (i) pollutants are discharged into waters of the state through a manmade ditch, flushing system, or other similar manmade device; or
 - (ii) pollutants are discharged directly into waters of the state that originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

The DEQ must conduct a site inspection prior designating an operation with less than 301 animal

units as a CAFO and requiring a permit (ARM 17.30.1330(5)). Details regarding size, runoff volume, distance to surface or ground water, slope and ground cover conditions must be considered by DEQ in assessing the likelihood and frequency of a discharge and making a case-by-case designation. Other relevant factors may include proximity to public water supplies, or public complaints.

Two or more AFOs under common ownership are considered to be a single AFO for the purposes of determining the number of animals at an operation if they adjoin each other or if they use a common area or system for the disposal of wastes.

A CAFO operator applies for the permit by completing Form 1 and Short Form B, paying a \$600.00 application fee, and paying a \$600.00 first year annual fee. Form 1 asks for general information concerning the request for permit coverage. Short Form B asks for information on facility ownership, location, size, physical surroundings, and waste control and land application practices.

Discharge Limits and Performance Standards of the Permit

The general permit places limits on discharges to surface and ground water. A discharge is allowable only when precipitation causes an overflow from a facility **designed, constructed, and operated to contain all process generated wastewaters plus the runoff from a 25-year, 24-hour rainfall**. A 25-year, 24-hour storm refers to the number of inches of rainfall in a 24-hour period that is expected to occur once in 25 years.

Rainfall from the 25-year, 24-hour storm has been mapped within Montana; the amount ranges between 1.8 and 4.4 inches. A permitted CAFO that discharges due to rainfall less than the 25-year, 24-hour storm is in violation of the permit. **Without a permit, any discharges of wastes from a CAFO to state waters are violations of the Montana Water Quality Act.**

A discharge of pollutants to state **ground waters** may only occur under certain, site-specific circumstances as determined in a facility's permit or permit authorization. Ground water contamination from AFOs most often results from leaking storage ponds and surface accumulations of solid manure, and confined animals on coarse-textured soil over shallow ground water.

The CAFO permit contains performance standards specifying that land application rates of solid manure, liquid manure or other solid or liquid wastes, not exceed annual crop requirements for nutrients. All facilities used for the collection, storage or treatment of manure, bedding materials, feeds and other substances having a waste contributing potential must be managed to prevent any pollutant from entering state waters. All wastes from dipping vats, pest and parasite control units and other facilities utilized for the application of hazardous or toxic chemicals must be handled and disposed of in a manner that prevents any pollutant from entering state waters.

Answers to questions pertaining to the CAFO permitting process can be obtained by contacting the DEQ Water Protection Bureau at (406) 444-3080.